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**MONTHLY PROGRESS REPORT NO. 3**

on

**COUNTERMEASURES TRANSMITTING SET AN/ALT-22(V)**

and

**BARRAGE JAMMER QRC-139A-(T)**

Modifications to

**AN/ALT-6B COUNTERMEASURES TRANSMITTING SET**

and

**QRC-139A-(T) AGE EQUIPMENT**

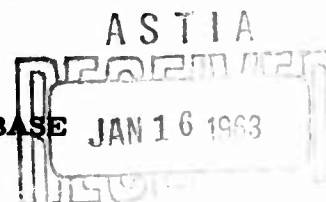
Contract AF 33(604)38334  
LMED Requisition 32634

Contract AF 09(603)41935  
LMED Requisition 32551

Period Covered: 1 December to 31 December 1962  
Date of Report: 11 January 1963

Prepared for

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## **SECTION I**

### **INTRODUCTION**

**This report describes the work accomplished from 1 December 1962 to 31 December 1962 on the manufacture of 30 L-Band QRC-139A-(T) jamming systems; the manufacture of two Broadband Spectrum Analyzers, with Converter-Measuring, "L" Frequency; one Servo Noise Amplifier modification kit; and one Noise Response modification kit. This effort is being performed in accordance with Letter Contract AF 09(603)41935.**

**The report also includes a description of the work accomplished during the same period under Contract AF 33(604)38334.**

## **SECTION II**

### **QRC-139A-(T) MODIFICATIONS TO AN/ALT-6B COUNTERMEASURES TRANSMITTING SET**

#### **A. EQUIPMENT DESCRIPTION.**

The QRC-139A-(T) equipment being procured under contract AF 09(603)41935 consists of 30 government-furnished AN/ALT-6B equipments modified to the QRC-139A-(T) barrage jammer configuration. These equipments, complete with QRC-139A-1-(T) oscillator groups, are to be supplied with deliveries starting in January 1963, and are to be completed in February 1963.

The control indicator and magnetron frequency control units which will be delivered will be the three mode-type units. These units are designed to provide the capability to preset three different sets of operating parameters, namely, Modes A, B, and C, for the modified system. When a remote control box is used in conjunction with the QRC-139A-(T) system, Mode A, B, or C can be selected as needed by an operator in the co-pilot's compartment.

#### **B. PROGRAM STATUS.**

All the government-furnished AN/ALT-6B equipment is ready for modification. The modification has been delayed due to the shortage of some of the new material needed to modify the equipment, but it will begin during the first week of January 1963. Twenty-two load isolators and five barrage magnetrons have been received. The delivery of barrage magnetrons

for this contract has been slower than expected due to the continuation of the low yield situation at Litton Industries.

**C. PROGRAM FOR NEXT INTERVAL.**

There will be monitoring of all factory work associated with the modification of the AN/ALT-6B equipment. The delivery of barrage magnetrons will be closely monitored. A potential problem still exists with this component.

**D. CONFERENCES.**

No conferences or meetings were held during this report period.

**E. CONTRACT AF 33(604)38334.**

The shipment of sixty L-band QRC-139A-(T) systems and twenty spare isolators and barrage magnetrons was completed during this report period. This completes the delivery of equipment on this contract. Delivery of the final version of the equipment performance specification was also accomplished in December 1962.

The following work remains to be accomplished on this contract.

1. Delivery of the Engineering Procurement Data (drawings) 30 days after receipt of First Article approval.
2. Delivery of the Final Engineering Report 45 days after receipt of the rough draft with Air Force approval.
3. Delivery of the final QRC-139A-(T) handbooks 30 days after receipt of the rough draft with Air Force approval.

### **SECTION III**

#### **QRC-139A-(T) AGE EQUIPMENT**

##### **A. EQUIPMENT DESCRIPTION.**

The spectrum analyzer contains ten wired boards and ten subchassis assemblies and is packaged in a combination case 19 inches wide, 19 inches high, and 27 inches deep. All wired boards slide into frames in various positions around a five-inch cathode ray tube. Cooling of the analyzer is accomplished by two fans, one of which has access to outside air. Primary power input is 115V AC  $\pm 5\%$ , 380-420 CPS, single phase. The weight of the unit in transit condition less the converter is 111 pounds.

Converter-Measuring, Frequency "L" has a separate transit case and plugs into the analyzer to provide L- band coverage. All a-c and d-c power for the converters is provided by the analyzer. The weight of the converter in the transit case is 29 pounds.

Modification kit (G-E Drawing No. 7520905G1) for the Servo-Noise Amplifier Test Set (G-E Drawing No. 7631547G1) contains input and output loads for the noise amplifier board, a replacement power transformer, a power relay, decals, miscellaneous wire and hardware, and installation instructions.

Modification kit (G-E Drawing No. 7520906G1) for the Noise Response Test Set (G-E Drawing No. 7732849G1) contains a dummy load for r-f inputs to the noise amplifier board, a coupling capacitor, a high power r-f load resistor, miscellaneous wire and hardware, decals, and installation instructions.



Two (2) each of the analyzer and converter and each modification kit are on contract for March delivery.

**B. PROGRAM STATUS.**

Fabrication and assembly of parts and circuits is currently in process. Cable assemblies for the units have been completed.

**C. PROGRAM FOR NEXT INTERVAL.**

Complete assembly of all circuits and the main analyzer unit and plug-in heads. At the end of this period the analyzers should be ready for unit electrical test.

**D. CONFERENCES.**

No conferences or meetings were held during this report period.

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